

## OROVILLE SPILLWAYS RESPONSE & RECOVERY 2017-2018



Lake Oroville damaged main spillway with an outflow of 100,000 (cfs).



Phase 1 repairs to main spillway allowed outflows of 100,000 (cfs), if necessary, during upcoming winter season.



Final concrete work on the upper chute of main spillway and the emergency spillway.

## K E Y M I L E S T O N E S



**Controlled blasting**. A detonation breaks up concrete from the lower chute of the damaged main spillway.



**Cleaning bedrock.** Workers remove loose rocks and debris in preparation for placement of concrete on the upper chute of the main spillway.



**Roller-Compacted Concrete (RCC)**. To facilitate curing, water is sprayed on RCC in an erosion area between the upper and lower chutes of the main spillway.



**Drainage system**. Drainage pipes are connected to the outer sidewalls of the upper chute of the main spillway.



**1,450-foot secant wall**. A concrete beam anchored to the top of the secant pile wall forms the base of the roller-compacted concrete splashpad.



**Construction of RCC splashpad**. Armored the hillside between the emergency spillway and secant pile wall to prevent erosion should the emergency spillway flow.



**Middle chute berm demolition**. Temporary RCC sidewalls are removed from main spillway prior to placement of permanent structural concrete walls.



**Inspection work**. DWR engineers check the leading edge of the upper chute where new structural concrete work will be poured on main spillway.



**Stay-forms**. Workers prepare for placement of leveling concrete on the upper chute of the main spillway.



**Structural concrete**. Crews place structural concrete on middle and upper chutes of the main spillway.



**Energy dissipator repair**. Concrete is placed atop an energy dissipator block on the lower chute of the main spillway.



**Concrete finishing**. Workers dry finish concrete slabs and sidewalls on the upper chute of the main spillway.